

Cybersecurity Professional Program Introduction to Python for Security

Loops

PY-03-L1 Range Loop

***** Lab Objective

Understand how to work with loops and the range function in a script.



Lab Mission

Practice how to create a range with various inputs in a loop.



Lab Duration

10 - 20 minutes



Basic knowledge of loops and the range function.



- **Environment & Tools**
 - Windows, macOS
 - Python 3
 - PyCharm

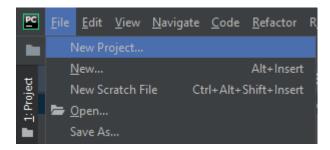


- Chapter 3: Loops
 - Section 1: For & While

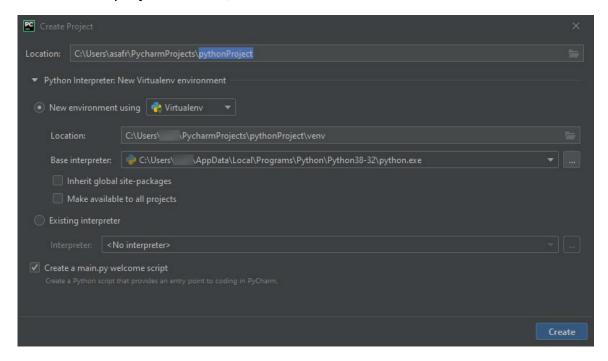
Lab Task: Range Loop

Write code in which the range function is modified in accordance with input from the user.

1 Open PyCharm, click **File** at the top left, and select **New Project**.



2 Give the new project a name, and click **Create**.



3 Create a variable that gets a number from the user to be used as the *range* function's upper limit.

```
upper_bound = input("Choose the range upper bound --> ")
```

4 Convert the input to an integer.

```
upper_bound = int(input("Choose the range upper bound --> "))
```

5 Create a **for** loop with the range function, where its starting point is 1, and its upper limit is the input from the user in the previous step.

```
upper_bound = int(input("Choose the range upper bound --> "))
for x in range(1, upper_bound):
```

6 Add a print function in the *for* loop that prints the result of each iteration.

```
upper_bound = int(input("Choose the range upper bound --> "))
for x in range(1, upper_bound):
    print("The next number in line is {}".format(x))
```